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(54) Title: MULTILAYER POLYMERIC STRUCTURE FOR ENHANCED GAS AND UV BARRIER

(57) Abstract: The coated multilayer structure comprising a polymeric base layer, a zero valent material barrier layer, and a top coat on the zero valent material barrier layer, the top coat comprising a soluble compound capable of reducing the permeability of the multilayer structure to gas or vapor. The zero valent material barrier layer can also enhance barrier to UV light. A method for enhancing the gas or vapor barrier properties or the UV light barrier properties of a multilayer polymeric/inorganic structure is also disclosed. According to one embodiment, Si coated polyethylene terephthalate containers are coated with a gas or vapor barrier enhancing top coat. A method for recycling containers coated with a zero valent material barrier layer is also disclosed.

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A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C08J7/04 B32B27/36 B32B15/08 B65D65/40 B65D85/72
B65D75/26

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, COMPENDEX

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Y	claims 1, 4 page 2, line 14 - line 16 page 4, line 52 - line 58 page 5, line 39 - line 50 ---	8-11, 14, 15, 68
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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